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ABSTRACT

Findings of this study of the managerial behavior of special education principals are compared with findings of other studies of managerial behavior of elementary and secondary principals. Mintzberg's theoretical model of administrative behavior (1973) was applied to special education principals. Five structured observations were conducted with five special education principals; field notes were coded for analysis. Similar coding systems were used among the three levels of principalship to derive comparisons. Special education principals and other principals spend similar proportions of their time on the activities of pupil control and organizational maintenance. Differences among the three are as follows: (1) Special education principals work at a less hectic pace, engage in fewer activities, and are minimally interrupted; (2) special education principals have a flexible work routine organized into blocks of time to attend meetings; and (3) special education principals spend more time completing deskwork, have longer meetings, and complete fewer supervisory activities than do regular principals. Special education principals were identified as figureheads and maintained a leadership position in daily operations. Nine tables of data and 23 references are included. (CJH)

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MANAGERIAL BEHAVIOR OF SPECIAL EDUCATION, ELEMENTARY, AND SECONDARY PRINCIPALS:

An Empirical Assessment

by

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EA 018 924

Paper presented at the Annual Meeting
of the Mid-Western Educational Research Association, October 16-18, 1986
Chicago, Illinois

Abstract

This study examined the managerial behavior of special education principals and compared it with the managerial behavior of elementary and secondary principals as reported by two other studies.

Mintzberg's theoretical model of administrative behavior was used to study the managerial behavior of special education principals. Five structured observations were conducted with five special education principals. Each principal was followed for a week. Field notes were taken and later coded for analytical purposes.

Overall, special education principals performed a total 2,978 work activities, with an average of 595.6 per week. Most activities were varied, interrupted, and short in duration. Some minor differences were observed as elementary, secondary, and special education principals were compared.

Ebersdorfer (1973) noted that administration of special education has become exceedingly complex, particularly since the 1960s. The majority of administrators were not prepared to adequately handle this complex dimension of educational management; nor does utilizing special education teachers as administrators appear to be the answer. Whitworth and Hatley (1979) stated that administrators often lack the knowledge base in the complicated field of special education, while teachers frequently lack the necessary administrative expertise to perform successfully as administrators.

The need for research in the area of special education administration has been widely documented in the literature. For example, Cain (1953), Haitema (1947), and Baer (1959) indicated the "paucity" of research dealing directly with the role of the special education administrators. Furthermore, no empirical studies are available to determine whether the management of special education schools is different from the management of traditional schools. The objective of this study was to examine the managerial behavior of special education principals and compare it with the managerial behavior of elementary and secondary principals. Specifically, this study of managerial behavior of special education principals is compared against Martin and Kmetz' studies of high school and elementary principals.

A Review of the Literature

The areas of administration and supervision in special education have grown rapidly since the inception of P.L. 94-142, making it essential that special education administration personnel take on a more extensive role in working with handicapped children and staff. Because professional staff who conduct programs for exceptional children have expanded so rapidly, it became clear and necessary to train administrators to oversee a variety of educational environments.

Between 1930 and 1950 the literature regarding special education administration was scarce. Baker (1944) reported nonetheless that, with the exception of a very few special schools, the administration of special education was in the hands of regular school administrators. However, some research inroads were beginning to be made in administration, supervision, and teaching (Cain, 1953).

Mackie and Engel (1955) reported an extensive study on special education leadership personnel, including directors and supervisors of special education. They stated that "this deepened understanding of elements, which contributes to effective leadership, is needed by special education administrators as a basis for measuring their own competency" (p. 2). Howe (1960) reported a study regarding leadership roles of the special education administrator. He felt that leadership roles of special education administrators had not been discussed much in the literature, even though the administrator usually acted as a leader for the development of programs. Howe also revealed that five studies were conducted prior to 1954 regarding the leadership role of the special education administrator.

Connor (1961) stated that special education programs are but a part of the larger administrative field of instruction different from, yet part of, the elementary and secondary schools. Connor (1966) also indicated that more information is needed regarding definitions, finances, organizational techniques, decision making, power structure, leadership qualities, curricular effectiveness, political activity, personal values, selection of personnel, preparation patterns, and community influences (p. 432).

Milazzo and Blessings (1964) reported that 40 colleges and universities had programs for the preparation of administrative and supervisory personnel. Only one-fourth included courses in either general or special education or special education administration, and only 16 offered full-time coursework. Henly (1967, 1969)

also found major differences among special education programs offered by universities. Of the 11 institutions studied in 1967, he found:

> A wide variety of courses was offered, including courses in general education administration, law, finance, public relations, and plant planning and courses in the field of business.
>
> Program emphasis within each institution varied greatly, and many unique patterns were found within individual university programs.

In suggesting a possible reason for the lack of program content agreement, Sage (1966) indicated that no basic tools were available for instruction in special education administration and/or supervision and no guidelines associated with the training programs.

Research related to the role of the special education administrator and organizational theory is available. Willower (1970) studied special education administration and organization from a social system dimension. Based on the (1963, 1966, 1969) back issues of The Review of Educational Research, Willower concluded that:

> Special education administration was something of a virgin—untouched by the concerns of organizational theory, social systems, bureaucratization, and the like that have become so salient in the literature in such areas as educational administration, business administration, public administration and several social sciences (p. 393).

Marro and Kohl (1972) conducted the first national study of the local administrator of special education programs. They examined personal characteristics, experience, the value of coursework, certification role in program administration and supervision, organizational characteristics, programming elements, and issues in administering programs in special education. They found that three out of four special education administrators were between the ages of 39 and 49 years

of age. Special education administrators ranked self-directed study as first experience contributing to their success, classroom or therapy experience as second, and in-service study and educational programs as third. When asked about their roles as administrators, the subjects cited their major activities as development of educational policies, selection of staff and personnel, and the assessment of teachers' performance.

Recent emphasis in special education administration resulted in the comparison of the role and tasks between the special education administrators with those of the general education administrator. For instance, Hill (1967) developed the Administrative Task Inventory (ATI), which contained 55 specific administrative tasks. In administering the ATI only to directors of special education and superintendents of schools, he found little disagreement between the two groups. Courtnage (1967) also used superintendents and directors as his sample comparison groups. He found strong agreement between the groups regarding their attitudes toward the internal responsibility and issues of special education administration. Nevin (1979) examined special education competencies that general education administrators thought they needed. The administrators named the same competencies that had been identified as important by special education administrators. Raske (1979) looked at the roles being performed by general school administrators since the passage of P.L. 94-142. He found that principals spend 14.6 percent of their time in special education duties. General and special education administrators were viewed as performing essentially the same administrative tasks in special education. The major difference lay not in what they did but in how much of their time they spent doing it. Raske recommended that all general school administration students be required to include special education components in their training programs.

In sum, very few training programs were provided for special education administrators before 1950. The administration of special education was in the hands of regular administrators. After 1950, however, the literature indicates a need for the special preparation of these special education leaders.

In the 1970s, with attention focused on the special education students' needs, came the increase for special education administrators. Once again, problems with a lack of research were noted in this area; and a need for more time in clinical supervision of special education administrators was emphasized. Also, no agreement was noted as to what core administrative courses and field experiences should be completed by administrators to be certified in the field of special education.

The recent emphasis on special education administration resulted in the comparison of the roles between the general and special education administrator. Few disagreements were cited between both administrative groups regarding task responsibility and assessment of personnel, but differences of opinions in attitudes and training programs were evident.

Theoretical Model

Mintzberg's Six Managerial Characteristics

Mintzberg (1973) proposed description of managerial work that consisted of six general characteristics:

The Volume and Pace of Work — Mintzberg's first observation on the nature of managerial work relates to volume of tasks to be performed and the rapidity with which they are accomplished. The job demands were structured in such a way that a time break seldom occurred.

Variety, Brevity, and Fragmentation — Another characteristic of managerial work was concerned with the nature of tasks performed relative to time, sequencing and duration. Mintzberg's observations demonstrated that executives' work entails a wide array of tasks that are frequently interrupted. Thus, rather than performing

one long, arduous task and subsequently beginning a second, the manager performs one and then another brief job in rapid succession with little sense of task completion.

Preference for Verbal Media — The third characteristic of managerial work was related to the choice of informational media. Four types of communication are available to the manager—telephone conversations, face-to-face meetings, paper correspondence, and the visual tour. Mintzberg's study noted that managers preferred verbal contacts either in person or on the telephone. The spoken word was more advantageous since speed, ease, informability and immediate feedback were important for communication.

Preference for Live Action — Mintzberg's study revealed that administrative positions were not occupied by reflective planners but by persons who preferred current information to dominate their activities. Managers invested little time in reflective planning, and priority usually went to tasks that required immediate action or could be quickly completed. This type of study results in managers being tied to appointment calendars.

The Network of Contacts — Mintzberg's fifth characteristic of managerial work involves the manager in the midst of a contact network with the organization. Three categories of contacts exist—subordinates, superiors, and organizational outsiders. The manager has been shown to play a role in two types of networks—one within the organization and the second between the organization and other environmental agents.

A Blend of Rights and Duties — Mintzberg's final characteristic of managerial work presented a combination of two aspects that represent opposing views of the overall control that a manager can exercise concerning role performance. While certain functions of a managerial workday are selected by the executive (rights), others are required as part of the role in the organization (duties).

Methodology

The research technique used in this study was structured observation as proposed by Mintzberg (1973). This method has been said to be reliable in gathering behavioral data (Lincoln & Guba, 1981). It allows the research directly to observe the manager as he/she performs, providing a general sense of the realities of administrative life (Willower, 1982).

In this study five special education principals were the study sample. Each principal was closely followed for five consecutive days as each principal performed his/her daily activities. All activities, except for a few confidential, were recorded and later analyzed. The notes contained a description of the activity, its location, time and duration, and participants. Brief sessions were held with the principal to clarify events and activities which occurred throughout the day. Furthermore, a final meeting with the principals was set up to triangulate the data and solve last-minute misunderstandings.

The data were also subjected to reliability checks. Three outside reviewers checked random samples of the data. They were told to categorize the findings according to the methodology used in this study. An interrater reliability coefficient of .90 was obtained as the researchers compared the categorization done by the outside reviewers and that of the researchers. Where disagreements occurred, the researchers evaluated their classification, allowing for better analysis of the data.

The field notes were systematically organized into four categories of observation: the chronological record, the correspondence record, the contact record, and the analysis of purpose.

The chronological record examined the time sequence and a description of the activities the principal is performing. The correspondence record included a description of each piece of printed or written material the principal reviewed.

This record was divided into incoming and outgoing correspondence. The contact record analyzed all contacts between the principal and others except for printed materials. Particular attention was given to the purpose of the contact, participants, location and duration, and its initiator. Finally, the analysis of purpose included the classification of the principals' activities into one of the broad categories.

Findings

The purpose of this study is to compare the managerial behavior of special education principals with secondary and elementary principals. This analysis includes a brief description of the subjects, comparisons of the chronological, contact, correspondence records, and the analysis of purpose.

The Subjects

The mean age for the special education principals was 46.0, whereas for elementary and secondary principals the means were 47.20 and 41.25. The average years of experience for special education principals ranged from 6.0 to 9.0 years. The highest mean for years of experience was 9.0 for elementary principals, while Martin's subjects had the lowest, with 6.2. Special education principals had 8.8 years. Finally, the size of the student population in each of the studies was different. Special education principals had 65 to 240 students, while Martin's had an average of 835, and Kmetz' had an average of 597.4 students.

Comparisons of the Chronological Data

A total of 13 different categories was analyzed including the mean number of activities, total time, percentage of time and duration among the three different sets of principals. The total work hours for the three different sets of principals ranged from 53.8 to 48.17, with secondary principals having the highest and special education principals having the lowest. The total after-hours mean (these are activities that take place beyond the school day) ranged from 11.0 to 4.72 hours.

Secondary principals spent the greatest amount of their time attending athletic events. Elementary principals after-hours activities fell between the other two sets of subjects (8.0). Most of their time was spent attending evening meetings. The after-hours work activities for special education principals are considerably less than the other two. Most of the special education principals' time was spent attending evening meetings or completing deskwork (see Table 1).

The total number of activities for the different sets of subjects differed. Special education principals engaged in a total of 2,978 activities, averaging 595.6 per week and 119.12 per day. Kemtz' subjects had a total of 3,058 activities, which averaged 611.6 per week and 122.3 per day. Martin's secondary principals had the highest number of activities with 3,730, with a weekly average of 746 and 149.2 activities per day. The variance among the three sets of subjects may be attributed to the school and staff size, as was mentioned earlier. It is evident that secondary principals engage in more activities per day than either elementary or special education principals.

The mean number of activities, mean total time, and mean percentage of time in deskwork sessions were the highest for special education principals. Elementary principals had similar mean percentage of time (18.6%) as the special education principals. The average duration for all three sets of subjects was similar, with approximately nine minutes per desk session.

Elementary principals had the highest mean number of activities (84.8), mean total time (233.4) and mean percentage of time (8.0%) in phone call activities when comparing the other two sets of subjects. Special education principals were the lowest in terms of the number of phone activities (70.6), while secondary principals had the lowest mean time for phone call sessions. All three sets of principals had similar mean durations of approximately 2.0 minutes.

Secondary subjects had the highest number of mean activities (23.4) in scheduled meetings, with elementary principals having the lowest (8.4). Special education principals spent more total time in scheduled meetings than any of the other sets of subjects (24.57%), and their meetings lasted an average of 49.53 minutes. The average duration of special education principals is almost double secondary and elementary principals.

Secondary principals had the highest number of unscheduled meetings (244.2), with special education principals having the lowest (166.6). However, elementary principals had the highest mean total time (913.0) and percentage of time (32.5) in unscheduled meetings. The mean duration for unscheduled meetings was similar for elementary and special education principals, with approximately four minutes. Secondary principals average duration was only 3.4 minutes.

Secondary principals had the highest mean activity total for exchanges (271.0), while special education principals had the lowest (168.4). The exchanges comprised 9.0 percent of the secondary principals' total time, while special education principals' and elementary principals' were only approximately 6.0 percent of their time. All of the subjects' exchanges lasted an average duration of one minute.

Monitoring activities for all three sets of subjects indicate that special education principals had the lowest mean activity number (8.6) than either secondary or elementary principals. The other two sets of subjects had almost double the amount of monitoring activities than the special education principals (16.4-18.4). In monitoring activities, the special education principals' mean total time (62.2) and percentage of time (2.06) were considerably lower than either the secondary or elementary subjects.

Special education principals had the highest mean activity for tours (44.0) but the shortest mean duration (2.49) and comprised only 3.63 percent of the subjects' time. Secondary principals had the lowest mean activity (17.6), but the

Table 1

Comparisons of Chronological Data for the Three Sets of Principalships

Total Job Hours Mean	42.2	41.7	43.45
Total After-hours Mean	11.0	8.0	4.72
Total Hours Worked Mean	53.8	49.7	48.17
Activities per Day Mean	149.2	122.3	119.12

	Martin	Kmetz	Madsen
	Secondary	**Elementary**	**Special Education**
Deskwork			
Mean No. of Activities	50.8	53.4	62.6
Mean Total Time	478.8	522.2	577.0
Mean Percent of Time	16.0	18.6	19.08
Mean Duration	9.4	9.8	9.22
Phone Calls			
Mean No. of Activities	78.6	84.8	70.6
Mean Total Time	173.6	223.4	211.4
Mean Percent of Time	5.8	8.0	6.99
Mean Duration	2.2	2.6	2.99
Scheduled Meetings			
Mean No. of Activities	23.4	8.4	15.0
Mean Total Time	520.2	290.6	743.0
Mean Percent of Time	17.3	10.3	24.57
Mean Duration	22.2	34.6	49.53
Unscheduled Meetings			
Mean No. of Activities	244.2	205.4	166.6
Mean Total Time	824.4	913.0	746.8
Mean Percent of Time	27.5	32.5	24.70
Mean Duration	3.4	4.4	4.48
Exchanges			
Mean No. of Activities	271.0	168.4	174.0
Mean Total Time	271.0	168.4	195.6
Mean Percent of Time	9.0	6.0	6.47
Mean Duration	1.0	1.0	1.12

Comparisons of Chronological Data for the Three Sets of Principalships

Monitoring			
Mean No. of Activities	16.4	18.4	8.6
Mean Total Time	163.6	122.6	62.2
Mean Percent of Time	5.5	4.4	2.06
Mean Duration	13.2	4.0	2.49
Tours			
Mean No. of Activites	17.6	29.2	44.0
Mean Total Time	231.6	116.6	109.8
Mean Percent of Time	7.7	4.2	3.63
Mean Duration	13.2	4.0	2.49
Trips			
Mean No. of Activities	2.2	7.4	12.4
Mean Total Time	65.4	150.8	59.8
Mean Percent of Time	.2	5.4	1.98
Mean Duration	29.7	20.4	4.82
Observation			
Mean No. of Activities	1.6	1.8	9.8
Mean Total Time	72.6	71.4	130.0
Mean Percent of Time	2.4	2.5	4.30
Mean Duration	45.4	39.7	13.26
Personal			
Mean No. of Activities	26.6	13.4	24.0
Mean Total Time	153.5	100.2	158.4
Mean Percent of Time	5.1	7.5	5.24
Mean Duration	5.8	3.6	6.6
Announcing			
Mean No. of Activities	12.2	9.8	6.8
Mean Total Time	20.6	20.2	25.0
Mean Percent of Time	0.7	0.7	0.83
Mean Duration	1.7	2.1	3.57
Teaching			
Mean No. of Activities	0.4	1.4	
Mean Total Time	3.6	54.2	
Mean Percent of Time	0.1	1.9	
Mean Duration	9.0	38.7	

Comparisons of Chronological Data for the Three Sets of Principalships

Processing**			
Mean No. of Activities	1.0	9.8	1.2
Mean Total Time	21.2	52.8	4.4
Mean Percent of Time	21.2	5.4	3.67
Mean Duration	0.7	1.9	0.15

*All times given in minutes

**No similar category in Kmetz' study. His category "Support Chores" was not used in the present study and is not the same as Processing. However, his data appears on this line.

subjects' tours lasted an average duration of 13.2 minutes. Secondary principals may take less tours than either special or elementary principals, but the tours are longer in duration and take more of the subjects' total time. Elementary principals' tour activities fell between special education and secondary principals.

Special education principals take more trips (12.4) than either secondary or elementary principals. These trips are shorter in duration (4.82) and comprise less of the subjects' time (1.98%) than either of the other two groups of principals. Elementary and secondary principals' trips usually lasted approximately 20 to 30 minutes and comprised small percentages of the subjects' time. Elementary principals' trips comprise the largest percentage of time than either of the secondary or special education principals' time.

Special education principals have the highest number of mean activities (9.8), total time (130.0) and percent of time (4.30%) in observational activities which lasted only 13.26 minutes; but secondary and elementary principals averaged more than 30 minutes longer.

Special education principals' announcing activities are less than either secondary or elementary principals. However, special education principals' mean total

time for announcing is longer (25.0). Special education principals use the public address system less than the two other sets of subjects, but they attend meetings that require them to announce to large groups. The average duration for special education principals was 3.57 minutes, while both the secondary and elementary principals' were shorter (1.7 and 2.1).

Comparisons of the Number of Activities Over Time and Task Duration

A comparison of the elementary secondary and special education principals' average number of activities over time reports the average number of activities per day, hour, and minute is reported in Table 2. Special education principals averaged 119.12 activities per day. This amount was slightly lower than the average number of activities per day for the elementary principals (122.3). Secondary principals had the highest average number of activities per day, with 149.2.

Special education principals engaged in an average of 13.7 different activities per hour. Elementary principals' rates were slightly higher, with 14.7 different tasks per hour. Secondary principals perform 17.7 tasks per hour.

An analysis of the activity duration for special education, secondary and elementary principals reveals that a large percentage of their activities lasted one to four minutes. Martin's subjects had the highest percentage (81.4%), with elementary having the lowest (77.0%). Special education principals' task duration percentage fell between the elementary and secondary subjects.

There was a small variability among the subjects for tasks lasting five to ten minutes. Elementary principals had the highest percentage in this area (13.5%), while special education principals' was the second highest, with 10.15 percent of their tasks lasting five to ten minutes. Secondary principals only had nine percent, which would indicate that a great amount of their tasks are shorter in duration.

All three sets of principals have similar engagement rates in tasks lasting more than ten minutes. The elementary and special education principals have slightly higher percentages than secondary principals in this area.

Special education principals' interruption rate of their work behaviors is much lower than the other two sets of subjects. The interruption rate for secondary and elementary principals revealed that more than 38 to 50 percent of their activities were interrupted, while the special education principals' interruption rate was considerably lower than the other two. Only 21.5 percent of the special education principals' activities were interrupted, leaving them with more time to complete tasks that were longer in duration. Another reason for the slower pace may be attributed to the small staff and student population. With a smaller student population, special education principals could afford to take more time in some activities. The mean student population for special education principals was considerably less than either the secondary or elementary principals' student population. Kmetz (1982) reported similar findings as to why his subjects had lower recorded daily activities for elementary principals.

Table 2

Comparisons of the Number of Activities Overtime

Activities Per:	Elementary	Secondary	Special Education
Day	122.3	149.2	119.12
Hour	14.7	17.7	13.7
Minute	0.3	0.3	0.23

Comparisons of Task Duration

Task Duration in Minutes	Kmetz 1982 Elementary	Martin 1980 Secondary	Madsen 1986 Special Education
1 to 4	77.0	81.4	80.31
5 to 10	13.5	9.5	10.15
More than 10	9.5	9.1	9.54

Comparisons of the Correspondence Record

All of the total correspondence of the elementary, secondary, and special education principals was compared among the three sets of subjects including its form, sender or receiver, purpose, attention received, and action taken. Secondary principals had the highest number of total correspondence, with 1,142, and special education principals had the lowest (778). Elementary principals had a comparable figure with secondary subjects, with 916. More than 60 percent of the three sets of subjects' correspondence was incoming.

Input Correspondence

Secondary principals had the highest mean number of incoming correspondence (155.6) (see Table 3). Elementary and special education principals were significantly lower than the mean of secondary principals' correspondence. Elementary principals had a mean total of 115.0 incoming mail, while special education principals had only 99.8.

It is evident (from Table 3) that forms and notes were the most common form for incoming correspondence for all three sets of principals. These two forms comprised 61.7 percent for secondary, 35.1 percent for elementary and 45.3 percent for special education principals. A large percentage of the secondary principals' incoming correspondence was notes, memos, and forms. This was similar to special education principals' input correspondence. Elementary principals' was slightly different, with the bulk of the input correspondence in the form of letters, forms and notes. Both special education (100) and secondary principals (92) received more memos than elementary principals (49). Elementary principals (53) and special education principals (44) had a much larger amount of reports to read than secondary principals (6).

All three sets of subjects received large amounts of incoming mail from teachers. Secondary principals had the highest percentage of input correspondence from teachers, with 44.2 percent, while special education principals (28.86%) and elementary principals (22.4%) were considerably lower. More than 72.5 percent of the input correspondence of secondary principals was from teachers, other organizational persons and vendors. Special education principals revealed similar findings, but only 76.35 percent of the input correspondence was from teachers, other organizational persons and external school-related personnel. Elementary principals had a different set of senders. Fifty-nine percent of the incoming correspondence was from teachers, superiors, and vendors. Both secondary (92) and elementary (119) had a large amount of input from vendors, while special education principals' correspondence was considerably lower in this subdividion (24). Kmetz' elementary principals had a higher amount of correspondence from parents (40) than did either secondary (7) or special education principals (6).

All three sets of subjects read a large percentage of their incoming mail instead of skimming or signing it. Special education principals read more than 40 percent of their input correspondence, whereas secondary (51.7%) and elementary (45.6%) subjects' were slightly higher. Both special education and secondary principals skim 38 percent of their incoming mail, while elementary principals' was slightly higher for skimming their mail (44.1%). Special education principals sign 21.44 percent of their incoming mail. This percentage is considerably higher than secondary (10.0%) or elementary principals (10.3%).

The main purpose of the input correspondence for all three sets of subjects was to give information. All of the three sets of subjects had more than 60 percent of their incoming mail for the purpose of giving information. More than 28.1 percent of the secondary principals' input correspondence was to request approval or require other assistance; the main purpose for elementary principals' input

Table 3

Comparisons of the Input Correspondence

	Martin Secondary			Kmetz Elementary			Madsen Special Education		
Total Input	778	115.6		575	115.0		499	99.8	
Form	No.	Mean	%	No.	Mean	%	No.	Mean	%
Letter	78	15.6	10.0	88	17.6	15.3	68	13.6	13.63
Note	93	18.6	11.9	71	14.2	12.4	77	15.4	15.43
Memo	92	18.4	11.8	49	9.8	8.5	100	20.0	20.04
Book	11	2.2	1.4	8	1.6	1.4	4	.80	.80
Periodical	12	2.4	1.2	17	3.4	3.0	7	1.4	1.40
Newspaper	9	1.8	1.2	17	3.4	3.0	7	1.4	1.40
Brochure	57	11.4	7.3	43	8.6	7.5	42	8.4	8.42
Form	387	77.4	47.6	131	26.2	22.8	149	29.8	29.86
Catalog	18	3.6	2.3	25	5.0	4.3	2	.40	.40
Check	14	2.8	1.8	8	1.6	1.4	3	.60	.60
Report	6	1.2	0.8	53	10.6	9.2	44	8.8	8.82
Media	1	0.2	0.1	4	0.8	0.7			
Sender									
Teacher	344	68.8	44.2	129	25.8	22.4	144	28.8	28.86
Superior	29	5.8	3.7	93	18.6	16.2	23	4.6	4.61
Other org. pers.	128	25.6	16.4	62	12.4	10.8	194	38.8	38.88
Ext. school-related pers.	71	14.2	9.1	29	5.8	5.0	43	8.6	8.62
Vendor	92	18.4	11.8	119	23.8	20.7	24	4.8	4.81
Citizen	7	1.4	0.9	3	0.6	0.5	6	1.2	1.20

Comparisons of the Input Correspondence (cont'd)

	Martin			Kmetz			Madsen		
	Secondary			**Elementary**			**Special Education**		
Government	46	9.2	5.9	12	2.4	2.1	28	5.6	5.61
Student	42	8.4	5.4	41	8.2	7.1	12	2.4	2.40
Professional org.	12	2.4	1.5	15	3.0	2.6	18	3.6	3.61
Parent	7	1.4	0.9	40	8.0	7.0	6	1.2	1.2
Other (Kmetz' secretary)				32	6.4	5.6	1	.20	.20
Attention									
Skim	298	59.6	38.3	254	50.8	44.1	192	38.4	38.48
Read	402	80.4	51.7	262	52.4	45.6	200	40.0	40.08
Sign	78	15.6	10.0	59	11.8	10.3	107	21.4	21.44
Purpose									
Give information	490	98.0	63.0	356	71.2	62.0	330	66.0	66.13
Request approval	72	14.4	9.2	65	13.0	11.3	107	21.4	21.44
Advertisement	65	13.0	8.2	106	21.2	18.4	19	3.8	3.81
Other	147	29.4	18.9	44	8.8	7.6	6	1.2	1.20
Request service	6	1.2	0.8	4	0.8	0.7	37	7.4	7.42
Action									
Contact initiation	91	18.2	11.7	8	1.6	1.4			
Convert to output	95	19.0	12.2	23	4.6	4.0	32	6.4	6.41
Forward	260	52.0	3.4	55	11.0	9.6	206	41.2	41.28
Post	34	6.8	4.4	78	15.6	13.6	6	1.2	1.20
File	102	20.4	13.1	102	20.4	17.7	99	19.8	19.84
Discard	79	15.8	10.1	96	19.2	16.7	34	6.8	6.81
Hold	71	14.2	9.1	100	20.0	17.4	92	18.4	18.44
Return	46	9.2	5.9	113	22.6	19.6	30	6.0	6.01

correspondence was also to request approval and also for advertisement. Together, these subdivisions comprised 29.7 percent of the elementary principals' correspondence. Special education principals' sole purpose for the input correspondence was to request approval and service, which comprised 28.8 percent of the subjects' mail.

The action that many of the subjects took upon receiving their incoming mail was varied. More than 58.7 percent of the secondary principals' actions were to convert to output, forward or file the incoming mail. Elementary principals handled their incoming mail differently, with 54.8 percent of the subjects either filing, holding, or returning the input correspondence. Special education principals were similar to both secondary and elementary principals, but they had a larger percentage (79.5%) of their incoming mail being forwarded, filed or held. Most of the special education and secondary principals' mail was forwarded, while elementary principals discarded more of their mail than did their counterparts.

Comparisons of Output Correspondence

The analysis of all outgoing mail generated by special education, elementary and secondary principals is presented in Table 4. The output correspondence was analyzed by form, target, purpose and action. The first set of numbers represents the actual number of outgoing mail, while the dual entries represent the mean and the percentage. All three sets had similar findings in the number of outgoing mail. Secondary principals had the highest (364), followed by elementary (341) and special education principals (289). Most of the outgoing mail comprised 30 percent of the three sets of subjects' total correspondence (31.9% secondary, 37.2% elementary, 36.7% special education).

It is evident that a large percentage of the three sets of principals' outgoing mail was in the form of notes. Elementary principals had the highest percentage (76.8%), with special education (69.9%) and secondary principals (65.1%) having

similar percentages. Elementary (8.0%) and special education (17.65%) principals' second largest percentage of outgoing mail was forms, while secondary principals' was memos (10.2%). Elementary and secondary principals had a higher number of reports to write than special education principals. Secondary principals wrote more letters than either elementary or special education principals.

All three sets of principals had a large percentage of their output correspondence directed toward themselves. Special education principals had the least percentage (40.83%), while elementary had the most (64.5%). The second highest percentage of targeted output correspondence was to teachers. The three sets of subjects had similar percentages of their output correspondence going to teachers. Both secondary (7.4%) and special education principals' (14.19%) third-highest outgoing mail was directed to other organizational persons. Elementary principals' other targeted output correspondence besides teachers and self was to parents.

The purpose for a large percentage of outgoing mail for secondary principals (33.0%) and special education (43.94%) principals was to give information, while elementary principals' was different. The main purpose of elementary principals' (36.4%) output correspondence was for long-term reminders. Both secondary (18.4%) and special education (20.42%) principals had similar percentages in this subdivision. Together reminders and long-term reminders comprised a large percentage of the outgoing correspondence for all three sets of subjects. Elementary principals had the highest (60.1%) followed by the secondary (60.1%) and special education (39.8%) principals.

The action that most of the three sets of subjects took with their output correspondence is also presented in Table 4. Both elementary and secondary principals had similar actions. Forwarding and posting their mail comprised a large percentage of secondary (78.8%) and elementary (75.4%) principals' output corre-

Table 4

Comparisons of the Output Correspondence

	Martin			Kmetz			Madsen		
	Secondary			Elementary			Special Education		
Total Output	364	72.8		341	68.2		289	57.8	
Form	No.	Mean	%	No.	Mean	%	No.	Mean	%
Form	34	6.8	9.3	27	5.4	8.0	51	10.2	17.65
Memo	37	7.4	10.2	14	2.8	4.1	21	4.2	7.27
Letter	31	6.2	8.5	9	1.8	2.6	4	.80	1.38
Report	25	5.0	6.9	25	5.0	7.3	9	1.8	3.11
Note	237	47.4	65.1	262	52.4	76.8	202	40.4	69.90
Other				4	0.8	1.2	2	.40	.69
Target									
Teacher	91	18.2	25.0	57	11.4	16.7	83	16.6	28.72
Superior	17	3.4	5.2	8	1.6	2.3	11	2.2	3.81
Self	190	38.0	52.2	220	44.0	64.5	118	23.6	40.83
Student	10	2.0	2.7	4	0.8	1.2	12	2.4	4.15
Parent	13	2.6	3.6	20	4.0	5.9	17	3.4	5.88
Other org. person	27	5.4	7.4	15	3.0	4.4	41	8.2	14.19
Ext. school-related person	4	0.8	1.1	2	0.4	0.6	2	.40	.69
Government(state)	7	1.4	1.9				3	.60	1.04
Vendor	2	0.4	0.5	2	0.4	0.6			
Citizen	3	0.6	0.8	1	0.2	0.3			
Other (Kmetz' secretary)				12	2.4	3.5	2	.40	.69

Comparisons of the Output Correspondence (cont'd)

	Martin			Kmetz			Madsen	
	Secondary			**Elementary**			**Special Education**	
Purpose								
Give information	120	24.0	33.0	85	17.0	24.9	127	25.4	43.94
Reminder	96	19.2	26.4	81	16.2	23.7	56	11.2	19.38
Long-term reminder	67	13.4	18.4	124	24.8	36.4	59	11.8	20.42
Request service	55	11.0	15.1	23	4.6	6.7	25	5.0	8.65
List of chores	18	3.6	4.9	19	3.8	5.6	2	.40	.69
Give approval	8	1.6	2.2	5	1.01	1.5	20	4.0	6.92
Other				4	0.8	1.2			
Action								
Forward	144	28.8	39.6	86	17.2	25.2	167	33.4	57.79
Post	143	28.6	39.3	171	34.2	50.2	2	.40	.69
Hold	35	7.0	9.6	61	12.2	17.9	20	4.0	6.92
File	30	6.0	8.2	23	4.6	6.7	98	19.6	33.91
Contact init.	12	2.4	3.3						

spondence. A large percentage of special education principals' output correspondence was forwarded and filed (91.7%). Special education principals very seldom posted their output mail (0.69%), while secondary (39.3%) and elementary (50.2%) principals' posting actions were considerably higher.

Comparisons of the Contact Record

Mintzberg's third characteristic is a preference for managers to employ verbal media. This characteristic was evident for all of the subjects involved in all three studies. Verbal contacts, which included exchanges, phone calls, and scheduled and unscheduled meetings, comprised a large percentage of time and work activities of all three sets of principals.

The following tables provide an analysis of the three sets of principals' verbal contacts. Each of the verbal contacts were analyzed for its number of participants, purpose of the contact and whether the contact was initiated by the subjects. Comparisons of the contact record will be made based on this information to determine specific participants, the purpose of the contact and the initiation by the subjects for the three sets of principals.

Exchanges.

Secondary principals had the highest mean total of exchanges (271.0). Special education and elementary principals' mean total was considerably lower. Both elementary (168.4) and special education (174.0) had comparable findings in this area. Exchanges (see Table 5) comprised 36.3 percent of the secondary principals' total number of work activities. Both elementary and special education principals had slightly lower percentages, with special education principals having the highest percentage, of 29.2 percent, and elementary principals (27.5%) having the lowest percentage for the number of total work activities.

The participant category reveals that the three highest mean totals for special education, elementary, and secondary principals all had similar participants

Table 5

Comparisons of the Contact Record - Exchanges

	Martin Secondary		Kmetz Elementary		Madsen Special Education	
Total						
Number	1355	271.0	842	168.4	870	174.0
Time	1355	271.0	842	168.4	978	195.6
Participants	Mean	%	Mean	%	Mean	%
Student	83.8	30.9	42.4	25.2	30.0	17.24
Teacher	61.0	22.5	45.6	27.1	40.4	23.22
Parent	1.4	0.5	2.8	1.7	1.6	0.92
Superior	0.4	0.1	2.6	1.5	1.0	0.57
Other org. person	14.0	5.2	17.8	10.6	16.6	9.54
Counselor	9.4	3.5	4.0	2.4	1.4	0.80
Secretary	91.4	33.7	42.8	25.4	79.8	45.86
Substitute teacher	3.4	1.2	1.4	0.8	.20	0.12
Social agent	0.2	0.1	0.8	0.5	.40	0.23
Citizen	1.2	0.4	1.4	0.8	.40	0.23
Vice principal	3.8	1.4	1.4	0.8		
Vendor	1.0	0.3	0.2	0.1	.20	0.12
External school-related person			4.0	2.4	2.0	1.15
Initiation other			1.2	0.7		
Self	152.8	56.4	83.8	49.8	137.0	78.74
Other	117.8	43.5	84.6	50.2	36.4	20.92
Both	0.4	0.11			.60	0.34
Purpose						
Give information	63.4	23.4	26.2	15.6	46.2	26.55
Get information	84.2	31.1	30.4	29.9	45.4	26.09

Comparisons of the Contact Record - Exchanges (cont'd)

	Martin		Kmetz		Madsen	
	Secondary		**Elementary**		**Special Education**	
Share information	10.0	3.7	15.0	8.9	23.6	13.56
Request service	37.6	13.9	23.2	13.8	21.0	12.07
Request information	8.0	2.9	32.2	19.1	6.6	3.79
Plan	5.2	1.9			4.6	2.64
Give service	8.0	2.9	10.6	6.3	6.4	3.68
Personal	26.8	10.5			5.0	2.87
Discipline	16.8	6.2	2.4	1.4	3.6	2.07
Give approval	9.2	3.4	6.0	3.6	11.6	6.67
Request approval			2.4	1.4		

in the exchange contacts. All three sets of subjects' exchange contacts were with students, teachers, and secretaries. Secondary (33.7%) and special education (45.86%) principals' highest percentages of exchanges were with their secretaries, while elementary principals' (27.1%) was with teachers. Secondary principals had the highest mean contact with the students (83.8).

Both secondary (152.8) and special education (137.0) principals initiated more of their exchange contacts than did the elementary principals (83.8). More of the elementary principals' exchange contacts were initiated by others than either secondary or special education subjects. Both secondary (0.4) and special education (0.6) principals had very few mutually initiated exchange contacts.

Secondary principals' purpose for the exchange contact was to request service (37.6) and to give (63.4) and get (84.2) information. Elementary principals' exchange purpose was similar with giving (26.2) and getting (50.4) information but also requesting information (32.2). Special education principals were similar to both elementary and secondary about giving (46.2) and getting (45.4) information but included sharing information instead (23.6).

Scheduled Meetings.

Scheduled meetings are those planned in advance (see Table 6). Secondary principals had the highest amount of scheduled meetings (23.4), followed by special education (15.0) and elementary principals (8.4). However, the highest overall percentage of the three sets of principals' time in scheduled meetings was held by the special education principals. More than 24.6 percent of the special education principals' time was spent in scheduled meetings, which was considerably higher than either elementary (10.3%) or secondary (17.3%) subjects. The mean average duration of the special education principals' scheduled meetings was 49.53 minutes, which was twice as high as either secondary (22.2) or elementary principals (34.6).

Table 6

Comparisons of the Contact Record - Scheduled Meetings Number and Duration in Minutes

	Martin's Secondary			Kmetz' Elementary			Madsen's Special Education		
Total									
No.	117		23.4	42		8.4	75		15.0
Time	2601		520.1	1453		290.6	3715		743.0
Participants	Mean No.	Time	% of Time	Mean No.	Time	% of Time	Mean No.	Time	% of Time
Teacher	5.6	144.0	27.7	4.0	109.6	37.7	3.2	130.2	17.52
Student	8.2	89.6	17.2	0.2	0.6	0.2	1.0	25.6	3.45
Parent	1.6	29.2	5.6	0.8	31.8	10.9	1.4	81.6	10.98
Counselor	1.8	34.6	6.6	1.0	25.0	8.6			
Superior	1.8	60.6	11.6	1.2	88.2	30.4	.80	26.6	3.58
Other org. pers.	2.4	60.6	11.6				6.0	321.8	43.31
Social agent	0.8	8.4	1.6						
Vendor	0.2	6.4	1.2						
Vice principal	0.2	8.4	1.6						
Ext. school-related pers.	0.8	78.4	15.1	0.8	19.8	6.8	1.4	103.6	13.94
Other				0.4	15.6	5.4	1.2	53.6	7.21
Initiation									
Self	15.8		67.5	5.4		64.3	1.8		12.0
Other	2.4		10.2	1.0		11.9			
Both	5.2		22.2	2.0		23.8	13.2		88.0
Purpose									
Give inform.	1.6	48.8	9.3	0.6	18.0	6.2	2.2	101.4	13.65
Get information	0.6	27.6	9.4	1.0	130.8	10.6	.40	8.2	1.10
Share inform.	9.0	249.0	47.9	1.4	42.8	14.7	4.0	208.2	28.02
Plan	3.4	96.4	18.5	4.2	181.4	62.4	6.6	317.2	42.69

Comparisons of the Contact Record – Scheduled Meetings Number and Duration in Minutes (cont'd)

	Martin's Secondary			Kmetz' Elementary			Madsen's Special Education		
Teacher rating	2.4	50.0	9.6	0.4	10.4	3.6	1.0	43.4	5.84
Give approval	0.4	1.6	0.3						
Request service	0.2	2.0	0.4	0.4	0.6	0.2			
Discipline	5.0	36.4	7.0	0.2	6.0	2.1	.20	33.0	4.44
Give service	0.8	8.4	1.6	0.2	0.6	0.2	.60	31.6	4.25

The main participants attending scheduled meetings with secondary subjects were students (8.2), teachers (5.6) and other organizational persons (2.4). These three groups comprised more than 60 percent of the secondary subjects' time. Elementary principals' scheduled meetings were with teachers (4.0), superiors (1.2) and counselors (1.0), which comprised 76.7 percent of their time. Special education principals' scheduled meeting contacts were teachers (3.2), other organizational persons (6.0) and parents (1.4), which comprised 71.81 percent of their time. More differences than similarities were noted among the three sets of principals for scheduled meeting participants. Special education, elementary and secondary principals' most common participants in scheduled meetings were teachers. Secondary (27.7%) and elementary (37.7%) principals' largest percentage of their time was spent with teachers, while special education principals spent most of their time with other organizational persons (43.31%).

A large percentage of secondary (67.5%) and elementary (64.3%) principals' scheduled meetings were initiated by themselves, while only 12 percent of the scheduled meeting contacts were initiated by special education principals. Because scheduled meetings for special education principals lasted for a longer period of time and required several staff members outside the school to attend (dorm staff, support personnel, and other administrators), these meetings were usually scheduled around other persons' availability rather than the special education principals'.

The main purpose for scheduled meetings for elementary, secondary, and special education principals was to plan and share information. Elementary principals comprised the highest percentage of time (77.1%) in these two areas, followed by special education (70.7%) and secondary (66.4%) principals. A large percentage of secondary principals' time (36.4%) in scheduled meetings was devoted to discipline problems. This was a considerably higher percentage than either elementary (2.1%) or special education principals (4.4%).

Unscheduled Meetings.

Table 7 provides an analysis of each of the three sets of subjects' unscheduled meeting activities. Secondary (244.2) and elementary principals (205.4) had a greater amount of unscheduled meetings than special education principals (166.6). Unscheduled meetings comprised a larger percentage of the elementary principals' time (32.5%), while secondary (27.5%) and special education (24.70%) principals' time in unscheduled meetings was lower. Both elementary and special education principals' mean duration was approximately 4.5 minutes, with secondary principals' mean duration lasting only 3.4 minutes.

Most of the unscheduled meetings for elementary, special education and secondary principals were with teachers and students. Elementary principals had the largest percentage of their time (56.1%) with these two groups, followed by secondary (54.0%) and special education principals (43.33%). Special education principals had a large number of unscheduled meetings with other organizational persons (34.0), which comprised more than 19.8 percent of their time. Both secondary (29.4) and elementary (19.6) principals had a much lower contact number with this group and comprised a much smaller percentage of the secondary (17.1%) and elementary (8.4%) principals' time.

More than 71.67 percent of the special education principals' unscheduled meetings were initiated by them. This percentage is slightly higher than either secondary (52.7%) or elementary (48.4%) principals. More than half of the secondary and elementary principals' unscheduled meetings were initiated by others.

The two main reasons for special education, secondary and elementary principals' unscheduled meetings were to get and share information. Secondary principals (57.1%) had the largest percentage in these two areas, followed by elementary (56.0%) and special education (39.5%) principals. All three sets of subjects had the highest percentage of their time in sharing information during their unscheduled

Table 7

Comparisons of the Contact Record - Unscheduled Meetings Number and Duration in Minutes

	Martin's Secondary			Kmetz' Elementary			Madsen's Special Education		
Total									
No.	1221		244.2	1027		205.4	833		166.6
Time	4122		824.4	4565		913.0	3734		746.8
Participants	Mean No.	Time	% of Time	Mean No.	Time	% of Time	Mean No.	Time	% of Time
Student	58.0	159.6	19.4	34.0	172.4	18.9	19.8	97.0	12.99
Teacher	82.2	285.0	34.6	73.8	339.8	37.2	59.2	226.6	30.34
Parent	2.0	6.8	0.8	7.4	33.6	3.7	1.2	7.2	.97
Counselor	15.6	62.0	7.5	11.6	47.4	5.2	5.4	19.40	2.60
Other org. person	29.4	140.8	17.1	19.6	76.8	8.4	34.0	148.2	19.84
Substitute	3.6	8.8	1.1	2.4	11.0	1.2			
Citizen	1.8	4.4	0.5	2.4	18.0	2.0	.20	2.2	0.29
Secretary	38.2	80.6	9.8	26.8	76.8	8.4	32.8	128.4	17.19
Vice principal	6.2	24.6	3.0	9.2	41.2	4.5	1.6	12.2	1.63
Superior	3.4	37.4	4.5	5.4	32.4	3.6	2.20	28.4	3.80
Social agent	0.4	1.0	0.1	0.6	2.2	0.2	1.6	12.4	1.66
Vendor	3.0	10.2	1.2	1.6	11.8	1.3			
Ext. school-related pers.	0.4	3.2	0.4	8.4	28.6	3.1	6.80	45.2	6.05
Other				2.0	20.4	2.2	1.80	19.6	2.63
Personal				0.2	0.6	0.1			
Initiation									
Self	128.8		5.27	97.4		48.4	119.4		71.67
Other	115.2		47.2	108.0		51.6	42.8		25.69
Both	0.2		0.1				4.4		11.40

Comparisons of the Contact Record – Unscheduled Meetings Number and Duration in Minutes (cont'd)

	Martin's Secondary			Kmetz' Elementary			Madsen's Special Education		
Purpose									
Give inform.	48.2	99.6	12.1	14.8	53.2	5.8	36.2	145.2	19.44
Get inform.	37.4	72.2	18.8	42.0	171.6	18.8	27.2	68.8	9.21
Share inform.	75.0	315.6	38.3	73.0	339.6	37.2	41.2	226.6	30.34
Plan	22.0	131.8	16.0	13.0	99.6	10.9	18.4	97.0	12.99
Request service	75.4	34.8	4.2	11.6	35.2	3.9	8.4	22.2	2.97
Give service	3.8	12.6	1.5	16.4	57.4	6.3	8.6	22.4	3.0
Personal	11.6	45.0	5.5	0.4	1.4	0.1	10.6	81.8	10.95
Discipline	16.8	79.0	9.6	13.2	86.6	9.5	3.0	34.4	4.61
Give approval	13.4	33.0	4.0	6.0	15.4	1.7	10.4	37.0	4.95
Request inform.	0.6	0.8	0.1	12.4	38.0	4.2	2.6	11.4	1.53
Teacher rating				0.6	8.6	0.9			
Request approval				2.0	6.4	0.7			

meeting contacts. Unscheduled meetings activities provided the subjects with more of an opportunity to meet with staff members for longer periods of time in order to share information in an informal manner.

Phone Calls.

Table 8 provides an analysis of the three sets of principals' phone activities. Phone calls were analyzed as to the number of participant initiation of the phone call and the purpose of the phone conversation.

The difference among the three sets of subjects in telephone contacts was minimal. Elementary principals had the highest mean number (84.8) and time (223.4) in phone activities. Both the secondary and special education principals had similar figures in this area. Between the two, secondary principals had the highest mean number of phone calls (78.6), while special education principals spent more time (211.4) with the phone contacts. All three sets of principals had a mean duration of two to three minutes for their phone conversations.

All three sets of principals had a high percentage of self-initiated phone contacts. Special education principals had the highest (71.1%), followed by secondary (66.7%) and elementary (60.5%) principals. More than 30 percent of the secondary and elementary principals' phone contacts were initiated by others, which was slightly lower than special education principals' (28.9%).

The three sets of subjects had giving and getting information as a common purpose for their phone contacts. However, special education principals' time was higher in both these two areas (51.46%) as opposed to either elementary (34.1%) or secondary (33.8%) principals. Both secondary (23.6) and elementary (22.2) principals had a high mean number of phone calls for the purpose of requesting service. These phone calls required a larger percentage of both the secondary (22.0%) and the elementary (17.3%) principals' time. Special education principals had both a low percentage (12.87%) and mean number (12.4) in this area.

Table 8

Comparisons of the Contact Record - Telephone Contacts Number and Duration in Minutes

	Martin's Secondary			Kmetz' Elementary			Madsen's Special Education		
Total									
No.	393		78.6	424		84.8	353		70.6
Time	868		173.6	1117		223.4	1057		211.4
Participants	Mean No.	Time	% of Time	Mean No.	Time	% of Time	Mean No.	Time	% of Time
Student	0.2	0.2	0.1				.20	1.2	0.57
Teacher	13.2	20.4	11.7	15.0	24.2	10.8	11.6	33.6	15.89
Parent	10.6	32.8	18.9	13.8	44.6	20.0	5.0	14.8	7.0
Counselor	3.6	5.0	2.9	2.2	5.4	2.4	0.20	0.80	0.38
Superior	3.8	8.4	4.8	11.0	38.8	17.4	2.8	10.2	4.82
Other org. person	14.2	27.2	15.7	1.6	2.6	1.2	27.4	90.0	42.57
Ext. school-rel. pers.	5.2	8.4	9.8	13.4	37.4	16.7	4.2	13.0	6.15
Secretary	9.4	11.0	6.3	4.2	6.8	3.0	10.0	13.0	6.15
Vendor	3.4	8.6	4.9	3.8	12.6	5.6	0.40	0.40	0.19
Personal	6.8	23.6	13.6	9.8	25.8	11.5	2.8	11.60	5.49
Citizen	5.2	5.8	3.3	7.4	18.6	8.3	.80	7.0	3.31
Substitute teacher	1.4	2.0	1.1	0.2	0.2	0.1	.60	3.0	1.42
Social agent	1.6	7.4	4.3	0.6	1.4	0.6	.20	.60	0.28
Vice principal	2.2	3.1	1.8	0.6	0.8	0.4	.60	.80	0.38
Other				1.2	4.2	2.0	3.8	11.4	5.39
Initiation									
Self	52.4		66.7	52.0		60.5	50.2		71.10
Other	26.2		33.3	32.8		39.5	20.4		28.90

Comparisons of the Contact Record - Telephone Contacts Number and Duration in Minutes (cont'd)

	Martin's Secondary			Kmetz' Elementary			Madsen's Special Education		
Purpose									
Give inform.	16.8	30.2	17.4	13.8	37.2	16.6	18.6	41.4	19.58
Get inform.	15.0	30.2	16.4	14.0	39.0	17.5	21.4	67.4	31.88
Share inform.	6.4	33.0	19.0	4.6	21.8	9.8	5.0	34.4	16.27
Request service	23.6	38.2	22.0	22.2	38.6	17.3	12.4	27.2	12.87
Plan	5.2	13.8	8.0	3.4	24.2	10.8	5.6	13.8	6.53
Give approval	1.2	2.0	1.1	0.8	2.4	1.1	2.2	5.2	2.46
Provide service	3.6	4.4	2.5	4.6	7.8	3.5	1.6	8.4	3.97
Personal	6.8	23.6	13.6	9.8	25.8	11.5	3.8	13.6	6.43
Request inform.				10.4	23.2	10.4			
Discipline				0.2	0.2	0.1			
Request approval				1.0	3.2	1.4			

Comparisons of the Analysis of Purpose

Both Martin (180) and Kmetz (1982) developed specific categories to analyze the purpose of the principals' work activities. The major categories were organizational maintenance, school program, pupil control, extracurricular, and undetermined (see Table 9).

Organizational maintenance reveals that a large percentage of the secondary (53.9%), elementary (53.7%) and special education principals' (59.76%) work activities are involved in administrative management of the school plant. However, these organizational maintenance tasks require more of the special education principals' time (55.23%) than either secondary (36.5%) or elementary (38.6%) principals' time. Organizational maintenance activities required the largest percentage of total time on all the subjects' parts.

Table 9

Comparisons of the Purpose for the Principals' Work Activities

	Secondary Principals	Elementary Principals	Special Education Principals
Mean Totals			
Number	668.6	544.8	507.0
Time	2369.8	2154.4	2,307.6
Organizational Maintenance			
Percent of Activities	53.9%	53.7%	59.76%
Percent of Time	36.5%	38.6%	55.23%
School Program			
Percent of Activities	7.6%	12.3%	4.42%
Percent of Time	17.4%	27.1%	8.67%
Pupil Control			
Percent of Activities	18.9%	24.4%	22.41%
Percent of Time	14.7%	3.7%	4.19%
Undetermined			
Percent of Activities	7.5%	5.3%	9.82%
Percent of Time	7.4%	7.0%	9.95%

The school program category indicates that elementary principals spent more of their time and number of activities in this area than either secondary or special education principals. Special education principals had the lowest percentage of activities and time in this area. Secondary principals fell between special education and elementary principals in the school program category.

All three sets of principals had similar percentages of their time and work activities in the pupil control category. Because secondary principals had a larger student population than either special education or elementary principals, it would be logical to assume that secondary principals would have higher percentages with the pupil control category. However, secondary principals had the smallest percentage (18.9%) of their activities in the pupil control category, while elementary (24.4%) and special education principals' activities were slightly higher.

Secondary principals were involved in more extracurricular activities (14.7%) than either elementary (3.7%) or special education (4.19%) principals. Both elementary and sepcial education principals had similar percentages in the area of extracurricular activities.

Those activities that were undetermined accounted for only a small percentage of all of the three sets of principals' work activities. Special education had the highest (9.82%) than either secondary (7.5%) or elementary principals (5.3%).

Conclusions

The objective of this study was to make comparisons between regular and special education administration through the use of structured observation. Similar coding systems and analysis of data among the three levels of principalship were used to make comparisons. With some exceptions special education principals' managerial behavior is more comparable to elementary principals than to secondary principals. Strict interpretation of the results should be limited because special education facilities contained a much smaller student and staff population than

either secondary or elementary principals' facilities. Low student and staff populations may have affected the activity total, the rate of interruption and the day-to-day pace.

Similar to secondary and elementary principals, special education principals performed a large volume of work activities that were varied, short in duration and often interrupted. A large percentage of the special education principals' work activities involved face-to-face contact with organizational insiders, which was similar to Martin's (1980) and Kmetz' (1982) findings. Special education principals' activities per day and hour were more comparable with elementary principals than with secondary principals. All of the three sets of subjects' task duration were similar, with the same percentages of tasks lasting one to four minutes.

The percentage of the special education principals' activities that were interrupted was lower than either secondary or elementary principals' interruption rate. Special education principals' activities were interrupted only 21 percent of the time, while the other two sets were interrupted 38 to 50 percent of the time. The busiest part of the day for special education principals was the first part of the day. Both secondary and elementary principals had comparable findings for their work density.

Special education principals and the other regular principals spent approximately similar proportions of their activities on pupil control and organizational maintenance. Elementary principals spent more time with the school program than either secondary or elementary principals. Special education principals were similar to elementary principals in the number of activities and percentage of their time in extracurricular activities. The total time investment of the after-hour activities for secondary principals is extremely high due to the emphasis of scholastic sports at the secondary level.

Several differences among secondary, elementary and special education principals were revealed during this study. Special education principals work at a less hectic pace, engage in fewer activities and are only minimally interrupted throughout the day. The work routine of special education principals is flexible and highly organized into large blocks of time to provide the subjects the necessary time to attend long scheduled meetings. Special education principals appear to have more time to complete their work activities than either secondary or elementary principals. This may in part be due to small student and staff populations at the special education facilities. Special education principals spend more of their time completing deskwork, have longer scheduled meetings and complete less supervisory activities than either secondary or elementary principals.

The flexibility of the special education principals' workday indicates they have more time for long scheduled meetings than either secondary or elementary principals. They also have more time for unscheduled meetings as opposed to exchanges for contacts when compared to secondary principals. The three levels of principalship had similar findings in face-to-face contacts. Special education principals spent more time with other organizational persons than either secondary or elementary principals. These contacts generally included dorm staff, school nurses, paraprofessionals and support personnel (psychologists, speech pathologists and occupational and physical therapists). Special education principals also read highly technical information (reports) regarding student progress, which indicated that special education principals must have more than a generalist degree in administration to interact with individuals within the organization.

Special education principals, with regard to Mintzberg's theoretical model, displayed the characteristics and roles identified by his research. Special education principals performed a high volume of work activities at an unrelenting pace, were frequently interrupted and preferred verbal contacts with insiders. Special

education principals were identified as figureheads within the organization and maintained a leadership position in the daily operation of the school. They were responsible for collecting and disseminating information. Special education principals were decision makers and handled disturbances that occurred at the schools.

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